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ABSTRACT

Following a literature search of the theories of personal maturation and career development, a study was conducted to identify personality and demographic variables related to career development and career concerns. Specifically investigated was the relationship between two sets of variables with self-concept, locus of control, and age in one set and career orientation, exploration, establishment, maintenance, disengagement, and career change in the other set. The population for the study was all students who had been accepted in the graduate nursing program at a southern university. The 109 students who were contacted completed four inventories: the Tennessee Self-Concept Scale, the Rotter Internal-External Locus of Control Scale, the Career Development Inventory (College and University Form), and the Adult Career Concerns Inventory. Analysis of the data yielded the following results: (1) support was found for Super's theory that a high self-concept is important to career development and that career decision making requires a sense of autonomy or an internal locus of control; (2) adults with positive feelings of self-worth and an internal locus of control were likely to be mature individuals secure in their level of career development and not likely to be interested in exploring new occupations; (3) adults with a lower self-concept and a more external locus of control might not as yet have crystallized a preference for a field of work and a specific occupation; and (4) support was found for Super's concept of career adaptability or the process of recycling through the stages of career development, especially at midlife. Thus, the study concluded, it cannot be assumed that as one ages, he or she automatically will be in any one predetermined stage. (KC)

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Personality and Demographic Variables Related to Career Development and Career Concerns

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Personality and Demographic Variables Related to Career Development and Career Concerns

The process of developing a career is an integral part of an individual's maturation process (Super, 1953, Super & Overstreet, 1960). As an individual matures, the development of career behaviors does not occur independently from the development of other behaviors appropriate to the age level (Bartlett, 1971; Munley, 1975; Super & Overstreet, 1960). Vocational stages occur with their corresponding developmental tasks as do other developmental stages and tasks (Super, 1963). Vocational developmental tasks change with age, experience, social vicissitudes, and physical and psychological changes (Super & Kidd, 1979). An individual's ability to meet these developmental tasks at any one point on the vocational development continuum reflects a level of career maturity (Super, 1953, 1955).

Career maturity, or vocational maturity (a synonym used by some), is viewed as the ability of the individual to cope with career or vocational tasks during a particular life stage. This ability is evaluated by comparison to others who are coping with these same vocational tasks at the same life stage (Super, 1963). The achievement of vocational developmental tasks leads to feelings of satisfaction and success with later vocational tasks. The failure to meet developmental tasks leads to feelings of failure and dissatisfaction and difficulty with later

developmental demands (Super & Overstreet, 1960). Thus, individuals making a career decision at the point of vocational readiness (Dysinger, 1950) or at a high level of career maturity would be challenged and ready for the experience, while those who have made this decision prematurely may have difficulty and may experience disappointment and frustration.

Based on Buehler's life-span theory (1933) and Havighurst's developmental stage theory (1953), Super developed a conceptual framework for understanding vocational development (Super, 1953, 1955, 1957). He identified life stages of age-related vocational development, each with corresponding developmental tasks (Super, 1953, 1972a). These stages are: growth, exploration, establishment, maintenance, and decline (Super, 1953, 1972b). The corresponding tasks are:

Growth

Developing a picture of the kind of person one is

Developing an orientation to the world of work and an understanding of the meaning of work

Exploration

Crystallizing a vocational preference

Specifying a vocational preference

Implementing a vocational preference

Establishment

Consolidation and advancement

Maintenance

Preservation of achieved status and gains

Decline

Deceleration

Disengagement

Retirement

Individuals may vary in their readiness to achieve the developmental tasks at any one particular stage or in their ability to meet them effectively (Jordaan & Heyde, 1979). Recently, Super (1983) has suggested that, for adults, career maturity might better be called career adaptability. Following a career change, adults may engage in a recycling process through the stages of growth, exploration, establishment, maintenance, and decline (Super, 1983).

Career maturity has been studied for many years, but the exact components which determine this construct have not been identified. In his Career Pattern Study, Super (Super & Overstreet, 1960) selected 28 variables as having possible correlations with vocational maturity. Some of these were intelligence, socioeconomic status, family relationships, grades, and age. Other concepts, such as self-esteem, personality traits, age, and styles of decision making, have been investigated by O'Hara and Tiedeman (1959), Phillips and Strohmer (1983), Richardson (1975), and Winer, Cesari, Haase, and Bodden (1979).

Results have indicated that career maturity is not a single construct but is made up of several cognitive and attitudinal variables which are somewhat interrelated with other variables.

The self-concept has been identified by various scholars as being important to career development and career maturity (Bordin, 1943; Carter, 1940; Crites, 1969; Super, 1953). However, studies which have investigated self-concept in relation to career maturity have not had consistent results (Barrett & Tinsley, 1977; Housley & Hickson, 1978; Lawrence & Brown, 1976; Sturtz, 1981).

The importance of locus of control to career maturity has been identified by Gardner (1981) and Super (1983). The results of studies by Bernardelli, DeStefano, and DuMont (1983), Froke (1976), McIntire, Drummond, and Ryan (1978), Miller and Winder (1976), Robinson (1981), and Stansbury (1976) indicated that locus of control was significantly correlated with career maturity. Studies have investigated career maturity in relation to locus of control and/or self-concept with various age groups (Froke, 1976; Gable, Thompson, & Glanstein, 1976; Helbing, 1979; Khan & Alvi, 1983). Although significant correlations with career maturity have been found, a few critical correlates have not been determined.

There has been little research relating age to career maturity. The assumption has been that career development is a continuous (cumulative) process and that age obviously is

associated with career maturity. Tilden (1978), however, has suggested that the process of career development is discontinuous after the high school years. Research, therefore, is needed to spell out the relationship between career maturity and age.

The purpose of the present study was to identify personality and demographic variables related to career development and career concerns. Specifically investigated was the relationship between two sets of variables with self-concept, locus of control, and age in one set and career orientation, exploration, establishment, maintenance, disengagement, and career change in the other set. The overall null hypothesis of no significant relationship between linear composites of the two sets of variables was tested.

Method

Subjects and Procedures

The population for this study was all the students who had been accepted in the graduate nursing program at a southern university. Four were males and 165 were females. Their ages ranged from 23 to 62 years old.

They were requested by letter to come to the university to complete four instruments: the Tennessee Self-Concept Scale (Fitts, 1965), the Rotter Internal-External Locus of Control Scale (Rotter, 1966), the Career Development Inventory (Super, Thompson, Lindeman, Jordaan, & Myers, 1981), and the Adult Career Concerns Inventory (Super & Thompson, 1985). Demographic information was

collected from a background information form accompanying the Adult Career Concerns Inventory.

Due to an inability of all participants to meet at one time, 73 completed the inventories in a classroom situation and 36 completed them in their homes. This procedure yielded a total of 109 respondents. To guarantee that the data would not be biased by a change in setting, the subjects were given a list of conditions to follow which would insure that the procedure would be identical to that conducted in the classrooms. In every case the same confidentiality precautions were used: Respondent's name appeared only on the demographic sheet and a testing code number was used on back of the other enclosures in the packet.

Instrumentation

The Tennessee Self-Concept Scale. The Tennessee Self-Concept Scale consists of 100 self-descriptive items which assess an individual's sense of self-concept and self-criticism. Two forms are available: Counseling Form and Clinical and Research Form. The Counseling Form, which is appropriate for self-interpretation and individual feedback, was selected for this study. The overall level of self-concept is measured by the total positive score which is appropriate for this study. The Tennessee Self-Concept Scale is a self- or group-administered test which takes 15 to 20 minutes to complete. Several scores on the Tennessee Self-Concept Scale have correlated highly with other personality inventories;

for example, the total positive score correlated -.70 with the Taylor Anxiety Scale. Test-retest reliability for the Tennessee Self-Concept Scale was found to be in the high .80s (Buros, 1972). Reliability for this instrument in the present study was indicated by an alpha coefficient of .91.

Rotter Internal-External Locus of Control Scale. The Rotter Internal-External Locus of Control Scale is designed to assess an individual's locus of control. The subject responds to 29 items which indicate a belief as to whether control comes from within one's self or is due to luck or fate or outside external influences. The score is the total number of choices which indicate that the subject believes external forces control the outcome of a situation. Reliability using the split-half Spearman-Brown and Kuder-Richardson formulas has been documented. For the present study, reliability of the Rotter Internal-External Locus of Control Scale was determined by an alpha coefficient of .76. Both face validity and construct validity have been established (Rotter, 1966).

Career Development Inventory, College and University Form. The Career Development Inventory, College and University Form, is a multi-dimensional, objective, paper-and-pencil inventory. It is designed to assess the readiness of college men and women in making a vocational choice. The Career Development Inventory, College and University Form, is comprised of eight scales which

assess attitudes, knowledge, and skills regarding pre-vocational or vocational decisions. The eight scales are: Career Planning, Career Exploration, Decision-Making, World-of-Work Information, Knowledge of Preferred Occupational Group, Career Development--Attitudes, Career Development--Knowledge and Skills, and Career Orientation Total. This measure can be administered in a group or can be self-administered. The Career Orientation Total, which combines Career Planning, Career Development, Decision-Making, and World-of-Work Information scores, was the only score used in this study. Reliability estimates for the Career Orientation Total score have been reported between .82 and .92 for the College and University Form (Thompson, Lindeman, Super, Jordaan, & Myers, 1982). For the present study, an alpha coefficient for the Career Orientation Total score was .86. Both content and construct validity have been established for this measure.

Adult Career Concerns Inventory. The Adult Career Concerns Inventory is a unidimensional inventory appropriate to assess career concerns of individuals of any age and occupation. It measures the stages exploration, establishment, maintenance, disengagement, and career change and the corresponding substages. Subjects respond to 65 statements of career concerns by rating each statement as being of no concern (1), little concern (2), some concern (3), considerable concern (4), and great concern (5)

to them at that time. The score for each stage was utilized in the data analysis for this study. Reliability and validity values have not been determined for this instrument by the authors. However, inspection of the test items and responses by the subjects indicate sufficient face validity. In the present study the alpha coefficient for each stage was: exploration .95, establishment .95, maintenance .94, disengagement .92, and career change .93.

Analysis

The Tennessee Self-Concept Scale, the Rotter Internal-External Locus of Control Scale, and the Adult Career Concerns Inventory were scored by the principal investigator. The Career Development Inventory was machine scored by the publisher.

To determine if there was a multivariate relationship between the resulting sets of variables, a canonical correlation analysis was employed. Variables in Set 1 were self-concept, locus of control, and age; in Set 2 were the variables of career orientation, exploration, establishment, maintenance, disengagement, and career change. This method of analysis was developed by Hotelling in 1936 (Pedhazur, 1982) for the purpose of studying the ways in which two sets of variables are related to each other and how much variance in one set is common or predictable from the other (Weiss, 1972). The advantage of using this procedure as compared to other procedures is that it has the

"capability of analyzing the relationships between sets of variables--many-to-many patterns of association as opposed to one-to-many patterns resulting from multiple regression (Levine, 1977, p. 11).

In canonical correlation analysis, linear variates are derived from the two sets of variables. In the determination of these linear combinations or variates, the two sets of variables are differentially weighted so that the maximum correlation between them is obtained. The number of canonical roots extracted is equal to the number of variables in the smaller of the two sets of variables. Because there were three variables in Set 1 and six variables in Set 2 in this study, it was theoretically possible to extract three canonical roots. For each root, the canonical correlation, representing the product-moment correlation between the derived variates, was computed. Because of the problem of multicollinearity related to the use of canonical weights (Levine, 1977), structure coefficients were employed in this study as a source of interpretation. Structure coefficients greater than .30 are considered to be meaningful (Pedhazur, 1982). However, in this study only the variables with the larger structure coefficients on a given canonical variate will be interpreted. Proportion of variance and redundancy coefficients were also determined.

Results/Conclusions

Of the three possible canonical roots, the canonical correlations for Roots 1 and 2 were determined to be significant (see Tables 1 and 2). The canonical correlation for Root 3 was not significant at the .05 level. The significance of the

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Insert Tables 1 and 2 about here

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canonical correlations for Roots 1 and 2, however, led to the rejection of the null hypothesis in this study.

Root 1

The canonical correlation coefficient for Root 1 of .53 represents a strong correlation between the two linear combinations of variables in Set 1 and Set 2. Squaring the canonical correlation coefficient gives a value which indicates that approximately 28% of the variance in one set is accounted for by the variance in the other set. Interpretation of the structure coefficients (see Table 3) of the first root suggested that

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Insert Table 3 about here

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self-concept (.87) and locus of control (-.77) in Set 1 were strongly related to exploration (-.64) and career change (-.74) in Set 2. The combination of a strong negative loading for locus of

control and a strong positive loading for self-concept indicates than an internal locus of control and a high self-concept are related to career maturity as indicated by the negative loadings for exploration and career change.

In Set 1, Root 1, the proportion of variance in age, self-concept, and locus of control explained by the respective canonical variate was 51.52. The redundancy coefficient for this root of 14.49 represents common variance in the canonical variate for Set 1 and the variables career orientation, exploration, establishment, maintenance, disengagement, and career change (see Table 3).

Within Set 2, Root 1, the proportion of variance in the six variables of career orientation, exploration, establishment, maintenance, disengagement, and career change stages explained by the respective canonical variate was 22.10. The redundancy coefficient of 6.21 reveals the variance shared by the canonical variate of Set 2 and age, self-concept, and locus of control (see Table 3).

Root 2

In Root 2 a canonical correlation coefficient of .44 also represents a significant relationship between these weighted linear combinations of variables in Set 1 and variables in Set 2. The squared correlation for this root indicates a shared variance of approximately 20%.

The second canonical root was characterized in particular by a strong positive loading for the age variable (.90) in Set 1 and disengagement (.75) and career change (.61) stages of the Adult Career Concerns Inventory for Set 2. A conclusion supported here seems to be that, as individuals age, they are apt to engage in an eventual disengagement process or career change.

In Root 2, Set 1, the proportion of variance in age, self-concept, and locus of control explained by the respective canonical variate was 31.14. Redundancy between the Set 1 canonical variate and career orientation, exploration, establishment, maintenance, disengagement, and career change was 6.14 (see Table 3).

In Root 2, Set 2, the proportion of variance in the six variables explained by the canonical variate was 16.62 while the redundancy coefficient was 3.27, indicating the common variance between the canonical variate for Set 2 and age, self-concept, and locus of control (see Table 3).

Discussion

Findings in this study support Super's theory that a high self-concept is important to career development and that career decision making requires a sense of autonomy or an internal locus of control (Super, 1983). Adults with positive feelings of self-worth and an internal locus of control are likely to be mature individuals presently secure in their level of career development.

They are not likely to be interested in exploring new occupations or in changing career plans as their modi operandi. Adults with a lower self-concept and a more external locus of control might not as yet have crystallized a preference for a field of work and a specific occupation or have taken steps to attain this preference. They are inclined to be less mature careerwise and more likely to be concerned about the exploration or career change stage. These individuals then may not have the level of self-concept and internal locus of control which is necessary for making career decisions.

Lack of contribution to the establishment, maintenance, and disengagement scales to this extracted root suggests that there is not a well-defined relationship between self-concept and locus of control and the stages of establishment, maintenance, and disengagement. Thus, self-concept and locus of control may be most relevant to the exploration and career change stages of the Adult Career Concerns Inventory. Maintenance and disengagement stages especially may be much more complex--that is, self-concept and locus of control may be only a very small part of these more complex and advanced stages.

The findings in this study also support Super's concept of career adaptability or the process of recycling through the stages of growth, exploration, establishment, maintenance, and decline. As individuals age, they may contemplate in mid-career changes in

employment and engage in re-exploring their interests and goals. Thus, it cannot be assumed that, as one ages, he or she automatically will be in any one predetermined stage such as maintenance. Anticipating a career change, one could be recycling and going back through earlier stages of the career development process.

References

Barrett, T. C., & Tinsley, H. E. (1977). Vocational self-concept crystallization and vocational indecision. Journal of Counseling Psychology, 24, 301-307.

Bartlett, W. E. (1971). Vocational maturity: Its past, present, and future development. Journal of Vocational Behavior, 1, 217-229.

Bernardelli, A., De Stefano, J., & Dumont, F. (1983). Occupational information-seeking as a function of perception of locus of control and other personality variables. Canadian Counsellor, 17(2), 75-81.

Bordin, E. S. (1943). A theory of vocational interests as dynamic phenomena. Educational and Psychological Measurement, 3, 49-66.

Buehler, C. (1933). Der menschliche Lebenslauf als psychologisches problem. Leipzig: Hirzel.

Buros, O. K. (1972). The seventh mental measurements yearbook (Vol. 2). Highland Park, NJ: Gryphon.

Carter, H. D. (1940). The development of vocational attitudes. Journal of Consulting Psychology, 4, 185-191.

Crites, J. O. (1969). Vocational psychology. New York: McGraw-Hill.

Dysinger, W. S. (1950). Maturation and vocational guidance. Occupations, 29, 198-201.

Fitts, W. H. (1965). Tennessee Self-Concept Scale manual. Los Angeles: Western Psychological Services.

Froke, B. K. (1976). A study of the relationships among locus of control, maturity of career attitudes and consistency and congruence of career choice. (Doctoral dissertation, University of South Dakota, 1976). Dissertation Abstracts International, 37, 3417A.

Gable, R., Thompson, D. L., & Glanstein, P. J. (1976). Perceptions of personal control and conformity of vocational choice as correlates of vocational development. Journal of Vocational Behavior, 8, 259-267.

Gardner, D. C. (1981). Career maturity and locus of control: Important factors in career training. College Student Journal, 15, 239-246.

Havighurst, R. J. (1953). Human development and education. New York: Longmans, Green.

Helbing, H. (1979). Maturity and self concepts. University of Amsterdam. (ERIC Document Reproduction Service No. ED 166579)

Housley, W. F., & Hickson, J. F. (1978). Selected self-concept variables as indicators of career maturity attitudes. Journal of Counseling Services, 2, 12-18.

Jordaan, J. P., & Heyde, M. B. (1979). Vocational maturity during the high school years. New York: Teachers College Press.

Khan, S. B., & Alvi, S. A. (1983). Educational, social and psychological correlates of vocational maturity. Journal of Vocational Behavior, 22, 357-364.

Lawrence, W., & Brown, D. (1976). An investigation of intelligence, self-concept, socio-economic status, race and sex as predictors of career maturity. Journal of Vocational Behavior, 9, 43-45.

Levine, M. S. (1977). Canonical analysis and factor comparison. Beverly Hills: Sage.

McIntire, W. G., Drummond, R. J., & Ryan, C. W. (1978). The relationship of locus of control to career maturity and work attitudes. Career Education Quarterly, 3(2), 54-60.

Miller, M., & Winder, P. A. (1976). Relationship of vocational maturity to locus of control of reinforcement. New York State Personnel and Guidance Worker, 11(1), 18-20.

Munley, P. H. (1975). Erik Erikson's theory of psychosocial development and vocational behavior. Journal of Counseling Psychology, 22, 314-319.

O'Hara, R. P., & Tiedeman, D. V. (1959). Vocational self-concept in adolescence. Journal of Counseling Psychology, 6, 292-301.

Pedhazur, E. J. (1982). Multiple regression in behavioral research (2nd ed.). New York: Holt, Rinehart, and Winston.

Phillips, S. D., & Strohmer, D. C. (1983). Vocationally mature coping strategies and progress in the decision-making process: A canonical analysis. Journal of Counseling Psychology, 30, 395-402.

Richardson, M. S. (1975). Self-concepts and role concepts in the career orientation of college women. Journal of Counseling Psychology, 22, 122-126.

Robinson, L. T. (1981). The relationship among personality factors, locus of control and career maturity of education majors at Mississippi Valley State University. Dissertation Abstracts International, 41, 4660A. (University Microfilm No. 81-8709)

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs: General and Applied, 80(1), 1-28.

Stanbury, J. C. (1976). Maturity of vocational attitudes and locus of control as dimensions of vocational personality types. (Doctoral dissertation, Kansas State University, 1976). Dissertation Abstracts International, 37, 4147A.

Sturtz, E. M. (1981). The relationship between personal acceptance and career choice contentment among graduate students in education. Bowling Green State University. (ERIC Document Reproduction Service No. ED 199407)

Super, D. E. (1953). A theory of vocational development. American Psychologist, 8, 185-190.

Super, D. E. (1955). The dimensions and measurement of vocational maturity. Teachers College Record, 57, 151-163.

Super, D. E. (1957). The psychology of careers--An introduction to vocational development. New York: Harper and Row.

Super, D. E. (1963). The definition and measurement of early career behavior: A first formulation. Personnel and Guidance Journal, 41, 775-779.

Super, D. E. (1972a). Vocational development theory: Persons, positions and processes. In J. M. Whiteley and A. Resnikoff (Eds.), Perspectives on vocational development (pp. 13-3). Washington, DC: American Personnel and Guidance Association.

Super, D. E. (1972b). Vocational development theory in 20 years: How will it come about? In J. M. Whiteley & A. Resnikoff (Eds.), Perspectives on vocational development (pp. 109-119). Washington, DC: American Personnel and Guidance Association.

Super, D. E. (1983). Assessment in career guidance: Toward truly developmental counseling. Personnel and Guidance Journal, 61, 555-562.

Super, D. E., & Kidd, J. M. (1979). Vocational maturity in adulthood: Toward turning a model into a measure. Journal of Vocational Behavior, 14, 255-270.

Super, D. E., & Overstreet, P. L. (1960). The vocational maturity of ninth-grade boys. New York: Teachers College Press.

Super, D. E., Thompson, A. S., Lindeman, R. H., Jordaan, J. P., & Myers, R. A. (1981). The Career Development Inventory. Palo Alto, CA: Consulting Psychologists Press.

Super, D. E., & Thompson, A. S. (1985). Adult Career Concerns Inventory. Unpublished manuscript.

Thompson, A. S., Lindeman, R. H., Super, D. E., Jordaan, J. P., & Myers, R. A. (1982). Career Development Inventory. College and University Form, supplement to user's manual. Palo Alto, CA: Consulting Psychologists Press.

Tilden, A. J. (1978). Is there a monotonic criterion for measures of vocational maturity in college students? Journal of Vocational Behavior, 12, 43-52.

Weiss, D. J. (1972). Research methodology. Canonical correlation analysis in counseling psychology research. Journal of Counseling Psychology, 19, 241-252.

Wiener, J. L., Cesari, J., Haase, R. E., & Bodden, J. L. (1979). Cognitive complexity and career maturity among college students. Journal of Vocational Behavior, 15, 186-192.

Table 1

Eigenvalues and Canonical Correlations

Statistic	Root 1	Root 2	Root 3
Eigenvalue	.39130	.24533	.02283
Canonical correlation	.53033	.44385	.14939
Squared correlation	.28125	.19700	.022328

Table 2

Wilks' Lambda and Level of Significance of the Three Possible Canonical Roots

Root	Wilks' Lambda	*F*	*df*	Significance of *F*
1 to 3	.56	3.35	18.00	.000
2 to 3	.79	2.47	10.00	.008
3 to 3	.98	.55	4.00	.697

Table 3

Structure Coefficients, Proportion of Variance, and Redundancy for Extracted Roots

Variable Set 1	Root 1 S	Root 2 S	Variable Set 2	Root 1 S	Root 2 S
Age	.44	.90	Career orientation	.46	.05
Self-concept	.87	-.17	Exploration	-.64	.11
Locus of control	-.77	.31	Establishment	-.37	-.07
			Maintenance	.08	.20
			Disengagement	.15	.75
			Career change	-.74	.01
Proportion of variance	51.52	31.14		22.10	16.62
Redundancy	14.49	6.14		6.21	3.27